

HARBOUR MASTER'S INSTRUCTION

03-2023

DATE: 05 April 2023

SUBJECT: Revised Operational Parameters for Large Container vessels

This Harbour Master Instruction supersedes the previous Harbour Master Instructions 01-2017 and 01-2022 which are now cancelled.

The purpose of this instruction is to set revised operational parameters for safe berthing and unberthing of large container vessels within the Port of Fremantle - Inner Harbour. The revision is based on operational experience and navigation simulations conducted during the last 12 months.

Vessels that are covered by this instruction are

- Container vessels with length overall (LOA) greater than **310 metres**
- Container vessels with beam greater than **43 metres** and length overall (LOA) less than or equal to **310 metres**
- Container vessels of length overall (LOA) **275 metres to 310 metres (turning circle criteria only)**

The largest container vessel size currently acceptable to call at Fremantle Ports is of nominal length overall (LOA) - **350 metres**.

Operational parameters for container vessels of length exceeding 310 m

Parameter	Nominal Length Overall Ranges (metres)	
	Greater than 310 m and less than or equal to 347 m	Greater than 347 m and less than or equal to 350 m
Turning on arrival	Yes	No
Daylight restriction for Turning on arrival	Yes	N/A
Turning on departure	Yes	
Daylight restriction for Turning during departure	Yes	
Time allotted for manoeuvre	2.5 hours With STU - 3 hours	2 hours With STU - 2.5 hours

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Parameter	Nominal Length Overall Ranges (metres)	
	Greater than 310 m and less than or equal to 347 m	Greater than 347 m and less than or equal to 350 m
Wind	<p>TOA 20 kts (10min average) Max gusts 25 kts</p>	<p>Max 15 kts (10min average) Max gusts 20 kts</p>
	<p>TDD Max 20 kts (10min average) Max gusts 25 kts</p>	
Towage	<p>TOA - AAAA + BT</p> <ul style="list-style-type: none"> • Escort Tug to RV - 1.5Nm from IH entrance buoys. • Other tugs to RV - 1.0Nm from IH entrance buoys. 	Arrival - AAA + BT
		Departure - AAAA + BT
	TDD - AAA + BT	
Current	0.3kts at swing basin	
Minimum Visibility	1 Nautical Mile	
Vessel Bitts and fairleads for towage	<p>Minimum Safe Working Loads (SWL) 1 set - 80T (Aft) Other sets - 65T (Forward and Aft)</p>	
Minimum Turning Basin	400m - 450m between CT1 and CT3. CT4 Turning basin is to be used by consultation with Harbour Master's office	
Pilots	2 (full pilotage) regardless of draft	
PPUs	Independent High Precision units	
Use of Deep-Water channel	Compulsory	
Berth NQ 1	To be clear	
Portainer cranes	Out of swing basin	

Parameter for vessels with beam greater than 43 metres and length (LOA) less than 310 m

Berth NQ 1 is required to be clear of vessels during the transit of the above class of vessels.

Parameter for vessels with length overall (LOA) 275 metres to 310 metres

All vessels greater than length overall (LOA) 275 metres are to use turning circles between berths CT1 and CT3 only. CT4 Turning basin is to be used by consultation with Harbour Master's office.

Notes: Terms used

- ✓ TOA - Turning on arrival
 - ✓ TDD - Turning during departure
 - ✓ BT - Bow Thruster
 - ✓ PPU - Portable Pilotage Units
 - ✓ Full pilotage - Pilotage from Outer Pilot boarding ground to Inner Harbour and return
 - ✓ STU - Shore Tension Units
- Turning on arrival for vessels > 310m will be subject to satisfactory completion of the Fremantle Ports vessel vetting process to confirm operational readiness. Upon completion, the Harbour Master's office will provide a written approval, for the manoeuvre to proceed.
 - Berthing at all container berths (CT1 - CT4) will be subject to assessment of clearances from other vessels on North Quay and Victoria Quay. If required, vessels on Victoria Quay opposite the container terminals may be required to vacate berth to facilitate turning of large container vessels. A turning basin clearance of **400m for vessels turning during departure and 450m for vessels turning on arrival**, is required.
 - A **35 metre** forward and aft clearance is required from vessels already alongside container berths.
 - Berthing at CT1 and CT4 is to be assessed on the basis of clearances from extremities. Eg - Berth NQ2 and Berth NQ 11 / 12.
 - Any draft restrictions based on the Inner Harbour declared depths will continue to apply.
 - An outbound vessel followed by an incoming vessel is to be separated by adequate time to avoid simultaneous use of the Deep-Water channel.



Capt. Savio Fernandes

Harbour Master